

Docket: 452058

RECEIVED
CENTRAL FAX CENTER

OCT 30 2006

IN THE CLAIMS

What the invention claimed is:

1-18. (Cancelled)

19. (Previously Presented) A PTFE article created by forming a mixture of a first resin and a second resin having a different molecular weight than said first resin, and then expanding said mixture, said article comprising:

an internodal arrangement between a first node and a second node, said

arrangement including a first plurality of fibrils interconnecting said first node with said second node, said first plurality of fibrils defining a first group of pores therebetween, said first group of pores falling substantially within a first size range;

said arrangement also including an intermediate node which is substantially smaller than said first and second nodes; a second plurality of fibrils attaching said intermediate node between said first and second nodes, said second plurality of fibrils defining therebetween a second group of smaller pores which fall substantially within a second size range;

said first and second size ranges being identifiably distinct;

said second plurality of fibrils being substantially shorter than said first plurality of fibrils; and

said arrangement being repeated between a third node adjacent to said first node and a fourth node located adjacent said second node.

20. (Previously Presented) The article of claim 19 wherein said first and second nodes are elongated and substantially parallel one to the other.

21. (Previously Presented) The article of claim 19 wherein the article is tubular.

22. (Previously Presented) The article of claim 19 wherein said third and fourth nodes are elongated and substantially parallel to said first and second nodes.

Docket: 452058

23. (Cancelled).

24. (Currently Amended) The article of claim 19 wherein said first size range is from about 2 to 15 microns and said second size range is from about 20 to 50 microns.

25. (Previously Presented) The article of claim 19 wherein said pores in said first size range are between 3 and 8 microns and said pores in said second size range are between 25 and 40 microns.

26. (Previously Presented) The article of claim 19 wherein said pores in said first size range being between 4 and 8 microns and said pores in said second size range being between 25 and 40 microns.

27. (Previously Presented) The article of claim 19 wherein said pores in said first size range are about 5 microns and said pores in said second size range are about 30 microns.

28-31. (Cancelled)

32. (Previously Presented) An expanded PTFE article for use as a tubular medical implant comprising:

a first material mixed with a second material to comprise a compound;
said compound being expanded to create a regularly repeated pore configuration throughout a substantial portion of said article;
said configuration comprising a first plurality of fibrils interconnecting a first node with a second node, said first plurality of fibrils defining a first plurality of pores therebetween;
a third node which is substantially smaller than said first and second nodes;
a second plurality of fibrils which are substantially shorter than said first plurality of fibrils, said second plurality attaching said third node between said first and second nodes, said second plurality of fibrils defining therebetween a second plurality of pores, said second plurality of pores being discrete from and smaller than said first plurality of pores; and

3 of 6

Response to June 28, 2006 Office Action
U.S. Patent Application Serial No.: 10/017,798

Docket: 452058

said article being adapted for use in blood-contact applications.

33. (Previously Presented) The article of claim 32 wherein said configuration is repeated throughout at least most of said article.

34. (Previously Presented) The article of claim 19 wherein said pore configuration is repeated regularly throughout a substantial portion of said article.

35-36. (Cancelled).

37. (Previously Presented) An expanded PTFE article for use as a medical implant comprising:

an internodal arrangement including an intermediate node which is interconnected between two a first transversely extending elongated node and a second transversely extending elongated node, a first group of pores being defined by a first group of fibrils which interconnect said intermediate node between said first and second elongated nodes;

said arrangement also including a second group of pores which are larger than and surround said first group of pores, said second group of pores being defined by fibrils which bypass said intermediate node and directly connect said first and second elongated nodes; and

said first group of pores having a first size range from about 2 to 15 microns in length and said second group of pores having a second size range from about 20 to 50 microns in length.

38. (Previously Presented) The article of claim 37 wherein said internodal arrangement is repeated between a third transversely extending elongated node which is adjacent said first transversely extending elongated node.

39. (Previously Presented) The article of claim 38 wherein said internodal arrangement is repeated between a fourth transversely extending elongated node which is adjacent said second elongated node.

Docket: 452058

40. (Previously Presented) The article of claim 37 wherein said first size range is between 3 and 8 microns in length and said second size range is between 25 and 40 microns in length .

41. (Previously Presented) The article of claim 37 wherein said first size range is between 4 and 6 microns in length and said second size range is between 25 and 35 microns in length.

42. (Previously Presented) The article of claim 37 wherein said internodal arrangement is repeated substantially throughout the entire article.